

COC# 78

11720 North Creek Pkwy N, Suite 400, Bothell, WA 98011-8244
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(541) 383-9310 FAX 382-7588

CHAIN OF CUSTODY REPORT

Work Order #: M106036

CLIENT: BRISTOL				INVOICE TO: BRISTOL				TURNAROUND REQUEST in Business Days* Organic & Inorganic Analyses <div style="display: flex; justify-content: space-around;"> <div>10 7 5 4 3 2 1 <1</div> <div>STD.</div> <div>5 4 3 2 1 <1</div> </div> Petroleum Hydrocarbon Analyses <div style="display: flex; justify-content: space-around;"> <div>5 4 3 2 1 <1</div> <div>STD.</div> <div>OTHER Please Specify</div> </div> <p><small>*Turnaround Requests less than standard may incur Rush Charges.</small></p>							
REPORT TO: ANNE KRANAWETTER				P.O. NUMBER: 21090											
ADDRESS: AMCHITKA ISLAND, ALASKA															
PHONE: 907-770-0974 FAX: 770-0975				PROJECT NAME: AMCHITKA											
PROJECT NUMBER: 21090				REQUESTED ANALYSES											
SAMPLED BY:															
CLIENT SAMPLE IDENTIFICATION		SAMPLING DATE/TIME		PCBs	Metals*							MATRIX (W, S, O)	# OF CONT.	COMMENTS	NCA WO ID
1. OIAMLA01MI		6/12/01 1745		X	X							S	2		
2.															
3. Cmu 8/7/01															
4. change ID #															
5.															
6.															
7.															
8.															
9.															
10.															
11.															
12.															
13.															
14.															
15.															
RELINQUISHED BY: <i>Cheli Marshall</i>				DATE: 6/12/01				RECEIVED BY: <i>Craig Bradle</i>				DATE:			
PRINT NAME: Cheli Marshall				FIRM: BRISTOL				TIME: 1830				FIRM: NCA			
RELINQUISHED BY:				DATE:				RECEIVED BY:				DATE:			
PRINT NAME:				FIRM:				TIME:				FIRM:			
ADDITIONAL REMARKS:														TEMP:	PAGE 1 OF 1
COC REV 3/99 * See SAP for Metals Assoc. in Lagoon.														74°C	



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6 December, 2001

Anne Kranawetter
Bristol Environmental & Engineering
2000 W International Airport C#1
Anchorage, AK 99502-1116

RE: Amchitka

Enclosed are the results of analyses for samples received by the laboratory on 06/12/01 18:35. If you have any questions concerning this report, please feel free to contact me.

This report was recreated from a previously issued final report in order to provide an electronic copy. The final report used for these electronic copies may have been previously issued as an amended report due to client requested changes to sample names, etc. No data has changed since submission of the previously issued final, or amended, report.

Sincerely,

Stephen Wilson
Environmental Group Leader

Work Orders included in this report:

M106036



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Bristol Environmental & Engineering
2000 W International Airport C#1
Anchorage, AK 99502-1116

Project: Amchitka
Project Number: 21090
Project Manager: Anne Kranawetter

Reported:
10/25/01 01:08

ANALYTICAL REPORT FOR SAMPLES

Sample ID	Laboratory ID	Matrix	Date Sampled	Date Received
01AMLA01MI-B	M106036-01	Soil	06/12/01 17:45	06/12/01 18:35

C.OC. #78

North Creek Analytical - Mobile Lab

Stephen Wilson, Environmental Group Leader

The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.

North Creek Analytical, Inc.
Environmental Laboratory Network

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Anchorage, AK 99502-1116

Project: Amchitka
Project Number: 21090
Project Manager: Anne Kranawetter

Reported:
10/25/01 01:08

Polychlorinated Biphenyls per EPA Method 8082
North Creek Analytical - Mobile Lab

Analyte	Result	Reporting Limit	Units	Dilution	Method	Prepared	Analyzed	Batch	Notes
01AMLA01MI-B (M106036-01) Soil						Sampled: 06/12/01 Received: 06/12/01			
Aroclor 1016	ND	167	ug/kg dry	1	EPA 8082	06/13/01	06/14/01	0106047	
Aroclor 1221	ND	334	"	"	"	"	"	"	
Aroclor 1232	ND	167	"	"	"	"	"	"	
Aroclor 1242	ND	167	"	"	"	"	"	"	
Aroclor 1248	ND	167	"	"	"	"	"	"	
Aroclor 1254	ND	167	"	"	"	"	"	"	
Aroclor 1260	ND	167	"	"	"	"	"	"	
Surr: 2,4,5,6-Tetrachloro-m-xylene	128 %	55-130							
Surr: Decachlorobiphenyl	126 %	55-130							

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Anchorage, AK 99502-1116

Project: Amchitka
Project Number: 21090
Project Manager: Anne Kranawetter

Reported:
10/25/01 01:08

Total Metals per EPA 6000/7000 Series Methods
North Creek Analytical - Mobile Lab

Analyte	Result	Reporting Limit	Units	Dilution	Method	Prepared	Analyzed	Batch	Notes
01AMLA01MI-B (M106036-01) Soil					Sampled: 06/12/01 Received: 06/12/01				
Arsenic	3.35	0.250	mg/kg dry	1	EPA 6020	06/13/01	06/14/01	0106044	A-01
Cadmium	ND	0.250	"	"	"	"	"	"	
Chromium	13.0	0.250	"	"	"	"	"	"	
Lead	4.27	0.250	"	"	"	"	"	"	
Selenium	0.598	0.250	"	"	"	"	"	"	
Silver	ND	0.250	"	"	"	"	"	"	
01AMLA01MI-B (M106036-01RE1) Soil					Sampled: 06/12/01 Received: 06/12/01				
Mercury	0.0191	0.00500	mg/kg dry	1	EPA 1631	06/24/01	06/25/01	0106082	

North Creek Analytical - Mobile Lab

Stephen Wilson, Environmental Group Leader

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Anchorage, AK 99502-1116

Project: Amchitka
Project Number: 21090
Project Manager: Anne Kranawetter

Reported:
10/25/01 01:08

Physical Parameters per APHA/ASTM/EPA Methods
North Creek Analytical - Mobile Lab

Analyte	Result	Reporting Limit	Units	Dilution	Method	Prepared	Analyzed	Batch	Notes
01AMLA01MI-B (M106036-01) Soil					Sampled: 06/12/01 Received: 06/12/01				
% Solids	75.3	0.0100 % by Weight	1		Gravimetric	06/13/01	06/14/01	0106046	

North Creek Analytical - Mobile Lab

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Bristol Environmental & Engineering	Project: Amchitka	
2000 W International Airport C#1	Project Number: 21090	Reported:
Anchorage, AK 99502-1116	Project Manager: Anne Kranawetter	10/25/01 01:08

Polychlorinated Biphenyls per EPA Method 8082 - Quality Control

North Creek Analytical - Mobile Lab

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
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Batch 0106047 - 3545 ASE

Blank (0106047-BLK1)

Prepared: 06/13/01 Analyzed: 06/14/01

Aroclor 1016	ND	167	ug/kg wet							
Aroclor 1221	ND	334	"							
Aroclor 1232	ND	167	"							
Aroclor 1242	ND	167	"							
Aroclor 1248	ND	167	"							
Aroclor 1254	ND	167	"							
Aroclor 1260	ND	167	"							
Surr: 2,4,5,6-Tetrachloro-m-xylene	26.2		"	66.7		39.3	55-130			A-02
Surr: Decachlorobiphenyl	26.2		"	66.7		39.3	55-130			A-02

LCS (0106047-BS1)

Prepared: 06/13/01 Analyzed: 06/14/01

Aroclor 1254	593	167	ug/kg wet	667		88.9	55-130			
Surr: 2,4,5,6-Tetrachloro-m-xylene	83.0		"	66.7		124	55-130			
Surr: Decachlorobiphenyl	89.9		"	66.7		135	55-130			S-08

Matrix Spike (0106047-MS1)

Source: M106036-01

Prepared: 06/13/01 Analyzed: 06/14/01

Aroclor 1254	1980	339	ug/kg dry	1800	ND	110	55-130			
Surr: 2,4,5,6-Tetrachloro-m-xylene	267		"	180		148	55-130			S-08
Surr: Decachlorobiphenyl	279		"	180		155	55-130			S-08

Matrix Spike Dup (0106047-MSD1)

Source: M106036-01

Prepared: 06/13/01 Analyzed: 06/14/01

Aroclor 1254	1960	339	ug/kg dry	1800	ND	109	55-130	1.02	40	
Surr: 2,4,5,6-Tetrachloro-m-xylene	266		"	180		148	55-130			S-08
Surr: Decachlorobiphenyl	274		"	180		152	55-130			S-08

North Creek Analytical - Mobile Lab

Stephen Wilson, Environmental Group Leader

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Anchorage, AK 99502-1116

Project: Amchitka
Project Number: 21090
Project Manager: Anne Kranawetter

Reported:
10/25/01 01:08

Total Metals per EPA 6000/7000 Series Methods - Quality Control

North Creek Analytical - Mobile Lab

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC Limits	RPD	RPD Limit	Notes
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Batch 0106044 - EPA 3050

Blank (0106044-BLK1)

Prepared: 06/13/01 Analyzed: 06/14/01

Arsenic	ND	0.250	mg/kg wet
Cadmium	ND	0.250	"
Chromium	ND	0.250	"
Lead	ND	0.250	"
Selenium	ND	0.250	"
Silver	ND	0.250	"

LCS (0106044-BS1)

Prepared: 06/13/01 Analyzed: 06/14/01

Arsenic	10.8	2.50	mg/kg wet	10.0	108	80-120	A-01
Cadmium	10.1	2.50	"	10.0	101	80-120	
Chromium	10.5	2.50	"	10.0	105	80-120	
Lead	10.8	2.50	"	10.0	108	80-120	
Selenium	10.2	2.50	"	10.0	102	80-120	
Silver	9.88	2.50	"	10.0	98.8	80-120	

Duplicate (0106044-DUP1)

Source: M106036-01

Prepared: 06/13/01 Analyzed: 06/14/01

Arsenic	3.00	0.250	mg/kg dry	3.35	11.0	40	A-01
Cadmium	ND	0.250	"	ND		40	
Chromium	12.2	0.250	"	13.0	6.35	40	
Lead	4.65	0.250	"	4.27	8.52	40	
Selenium	0.597	0.250	"	0.598	0.167	40	
Silver	ND	0.250	"	ND		40	

Matrix Spike (0106044-MS1)

Source: M106036-01

Prepared: 06/13/01 Analyzed: 06/14/01

Arsenic	18.5	2.50	mg/kg dry	13.3	3.35	114	75-125	A-01
Cadmium	14.3	2.50	"	13.3	ND	108	75-125	
Chromium	28.2	2.50	"	13.3	13.0	114	75-125	
Lead	20.0	2.50	"	13.3	4.27	118	75-125	
Selenium	13.9	2.50	"	13.3	ND	100	75-125	
Silver	13.5	2.50	"	13.3	ND	102	75-125	

North Creek Analytical - Mobile Lab

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Anchorage, AK 99502-1116

Project: Amchitka
Project Number: 21090
Project Manager: Anne Kranawetter

Reported:
10/25/01 01:08

Total Metals per EPA 6000/7000 Series Methods - Quality Control

North Creek Analytical - Mobile Lab

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC Limits	RPD	RPD Limit	Notes
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Batch 0106082 - EPA 1631

Blank (0106082-BLK1)

Prepared: 06/24/01 Analyzed: 06/25/01

Mercury	ND	0.00500	mg/kg wet						
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LCS (0106082-BS1)

Prepared: 06/24/01 Analyzed: 06/25/01

Mercury	0.0112	0.00500	mg/kg wet	0.0100		112 85-115			
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Duplicate (0106082-DUP1)

Source: M106036-01RE1

Prepared: 06/24/01 Analyzed: 06/25/01

Mercury	0.0224	0.00500	mg/kg dry		0.0191		15.9	20	
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Matrix Spike (0106082-MS1)

Source: M106036-01RE1

Prepared: 06/24/01 Analyzed: 06/25/01

Mercury	0.0328	0.00500	mg/kg dry	0.0133	0.0191	103 75-125			
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Stephen Wilson, Environmental Group Leader

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Project: Amchitka
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Reported:
10/25/01 01:08

Notes and Definitions

A-01 The ICV had 112 % recovery, indicating potential high bias.

A-02 Surrogate spike recoveries were low and out of control limits due to a leak that occurred during automated solvent extraction. Sample integrity has not been compromised.

S-08 Surrogate recovery is above control limits. Since no analytes were detected in the sample, the quality of the data has not been affected.

DET Analyte DETECTED

ND Analyte NOT DETECTED at or above the reporting limit

NR Not Reported

dry Sample results reported on a dry weight basis. MRLs are adjusted if %Solids are less than 50%.

wet Sample results reported on a wet weight basis (as received)

RPD Relative Percent Difference

North Creek Analytical - Mobile Lab

Stephen Wilson, Environmental Group Leader

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Environmental Laboratory Network

8 of 8

Items for Project Manager Review

LabNumber	Analysis	Analyte	Exception
			Default Report (not modified)
			Report recreated from: \\sisters\elmnt\Report\M106036 FINAL 10 25 01 0108.mdb
0106044-BS1	As Total ICPMS 6020	Arsenic	A-01
0106044-DUP1	As Total ICPMS 6020	Arsenic	A-01
0106044-MS1	As Total ICPMS 6020	Arsenic	A-01
0106047-BLK1	8082 PCB	Decachlorobiphenyl	A-02
0106047-BLK1	8082 PCB	2,4,5,6-Tetrachloro-m-xylene	A-02
0106047-BLK1	8082 PCB	2,4,5,6-Tetrachloro-m-xylene	Exceeds lower control limit
0106047-BLK1	8082 PCB	Decachlorobiphenyl	Exceeds lower control limit
0106047-BS1	8082 PCB	Decachlorobiphenyl	S-08
0106047-BS1	8082 PCB	Decachlorobiphenyl	Exceeds upper control limit
0106047-MS1	8082 PCB	Decachlorobiphenyl	S-08
0106047-MS1	8082 PCB	2,4,5,6-Tetrachloro-m-xylene	S-08
0106047-MS1	8082 PCB	Decachlorobiphenyl	Exceeds upper control limit
0106047-MS1	8082 PCB	2,4,5,6-Tetrachloro-m-xylene	Exceeds upper control limit
0106047-MSD1	8082 PCB	Decachlorobiphenyl	S-08
0106047-MSD1	8082 PCB	Decachlorobiphenyl	Exceeds upper control limit
0106047-MSD1	8082 PCB	2,4,5,6-Tetrachloro-m-xylene	S-08
0106047-MSD1	8082 PCB	2,4,5,6-Tetrachloro-m-xylene	Exceeds upper control limit
M106036-01	As Total ICPMS 6020	Arsenic	A-01